

same form, but their structure is the same, or at least appeared to me to be so. They are wedge-shaped or parallelogrammic, about $\frac{7}{100}$ ths of a millimetre in length, and from $\frac{4}{100}$ ths to $\frac{6}{100}$ ths in breadth. It is very difficult to ascertain their thickness, but I believe it to be about a third of their length. They are composed of at least two layers of two or three rows of broad cells on either surface, as visible under the microscope. Their colour is a deep green verging on bistre. I know of nothing at all similar in the family of Mosses, and at least in a physiological point of view, the fact is not unimportant. It must be observed that the capsules were quite ripe, having already lost their opercula, so that the question is not one of unripe spores. The species in which this curious structure was observed is *Eucamptodon perichæticalis*, Mont."

Dr. Montagne kindly accompanied his observations with specimens, which has enabled me to confirm their correctness.—M. J. B.

M. AGASSIZ on the Geological Development of Animal Life.

The Zoophytes, Mollusca and Articulata existed in the earliest period of the earth's development, although all their classes were not numerously represented in the oldest members; but they do not allow of our supposing that any progressive perfection to the present creation occurred. This is the case with the Vertebrata only, among which fish appeared in the first period, reptiles in the second; mammalia and birds did not appear for a long time after the former; lastly came man, as lord of all: hence M. Agassiz denominates the corresponding periods, those of fish, reptiles and mammalia.

The greatest change in the fish occurred at the end of the Jura period. All fish which existed prior to the chalk have a peculiar aspect and belong in general to extinct families; those of the later epochs resemble those now living, and many of them belong to families and genera at present in existence; but they all differ specifically, just as *all* Vertebrata in different geological epochs differ in species.—*Jahrbuch für Mineralog. Geolog. &c.*, Part 3. 1845.

EXPLORATIONS OF DR. SCHRENK.

The extreme limits of the wild and remote regions of south-eastern Siberia and along the Chinese frontier have been successfully explored by an able and enterprising botanist, Dr. Schrenk, who has recently returned to St. Petersburg. Remote and unfriended, this ardent naturalist has passed four years in a country, the greater part of which was never before trodden by an European foot. In addition to copious materials with which he will soon enrich botany, geology, and other branches of science, he has made most important observations on the eastern extension of the mass of land which forms a portion of that vast depressed area so vividly brought before our consideration by Humboldt, and which is now found to extend eastward from the shores of the Aral to the Saissar and Balkash lakes; though in approaching the latter region the ground rises to a few hundred feet above the sea. Thence penetrating to the lake of Issikul, surrounded by lofty mountains considerably south of the range of the

Altai chain, and obtaining from one of them a view of the Thian-Chan, whose height he estimates from 16,000 to 17,000 feet, nearly one-half being covered with eternal snows, Dr. Schrenk won for himself the proud title of being the first European who had pushed his researches to the northern foot of the "celestial mountains" of the Chinese empire. It is indeed quite clear, from what I already know of them, that Dr. Schrenk's researches must materially change all earlier maps; for though the lake Balkash is laid down, the Issikul does not appear, at least not by that name. Again, the sources of the Tchu river, and its course into the Telekul lake, and the occasional communication between that lake and the Jaxartes (Sir Daria); the true course of the latter stream is the country watered by the upper streams of the Sara Su-a-Ishein, where alone the beautiful mineral "diopase" is found.—*From the Anniversary Address of the President of the Royal Geographical Society.*

Description of three new species of Bivalve Shells, of the genera Cytherea and Venus, by SYLVANUS HANLEY, Esq.

CYTHEREA OVUM. *Cy. testâ ovatâ, solidissimâ, æquivalvi, ventricosâ, nitidâ, lævigatâ, albidâ, epidermide fulvâ indutâ; margine ventrali integro, arcuato; dorsali, utrinque convexiusculo et subdeclivi; latere antico rotundato; postico obtusè subangulato, superuè glauco-cinereo; natibus rectè incurvatis, sæpè crocis; lunulâ obsoletâ; superficie internâ albidâ, posticè livido-purpurascente infectâ; dente postico leviter crenulato; sinu palliari vix ullo.* Long. 0·90; lat. 1·20 poll.

Index Test., sup. t. 15. f. 21. Mus. Cuming, Hanley.

Hab. — ?

Remarkable for its peculiar solidity and the equality of its sides. It bears a slight resemblance to the true *casta* of Chemnitz, but is a more ovate shell.

VENUS BRUGIERI. *Ven. testâ oblongâ, solidiusculâ, subnitidâ, convexâ, valdè inæquilaterali, aut pallidè brunneâ, radiis paucis albis ornata, aut fusco-cinereâ, radiis saturatoribus angustis remotis interruptim pictâ; radiatim sulcatâ; sulcis in medio subimbricatis, utrinque subdecussatis, et posticè in costellas (plerumque subgranosas) mutatis; margine ventrali subrecto aut paulò convexiusculo; dorsali, posticè vix declivi, subrecto aut convexiusculo, anticè subdeclivi et convexiusculo; extremitate anticâ rotundatâ; latere postico producto, obtusè et obliquè biangulato; margine postico magis minusve convexo; natibus curvatis et radio brevi livido posticè ornatis; lunulâ subobsoletâ; ligamento subinfosso; margine cardinali intus purpureo; dentibus angustis, recurvis, parallelis.* Long. 0·85; lat. 1·40 poll.

Index Test., sup. t. 15. f. 59. Mus. Cuming, Hanley.

Hab. — ?

Belonging to the section *Pullastra*, and allied to *decussata*, but easily distinguishable by its shape and peculiar sculpture. It has however been figured for that species in the 'Encyclopédie Méthodique,' pl. 283. f. 4.